
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Daniel Edelstein, Copper Specialist

Telephone: (703) 648-4978, Fax: (703) 648-7757

E-mail: dedelste@usgs.gov

Stephen Frauenheim (Data), (703) 648-7977

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

COPPER IN MARCH 1997

Mine production rose by about 10% from February's low level, yet remained 4% below that for March 1996. Primary smelter production rose to the highest monthly level in more than 20 years. Kennecott's smelter operated near full capacity prior to its anticipated April closure. Total refined production for the first quarter of 1997 was at about the same level as in the first quarter of 1996. Quarterly consumption, on the other hand, rose by more than 5% compared with the same period in 1996.

Despite the closure of two rod mills in 1995, wire rod production has continued to increase. Production in the first quarter of 1997 was 11% higher than in the equivalent period in 1996. Most rod mills operated at or near capacity, and several mills reported incremental increases in capacity. According to its company annual report, ASARCO Incorporated completed an upgrade to its continuous cast rod mill at Amarillo, TX, that increased the mill's capacity by 17% (ASARCO Incorporated, 1997). Cyprus Amax Minerals Co. reported that its Miami, AZ, rod mill operated above design capacity in 1996 (Cyprus Amax Minerals Company, 1997). Phelps Dodge Corp., which operates continuous cast plants in El Paso, TX, and Norwich, CT, also operated at above design capacities in 1996 (Phelps Dodge Corp., 1997).

Workers at Phelps Dodge's Chino Mine, in New Mexico, remained on the job despite failure to reach a labor contract agreement with management. Their current contract expired on June 30, 1996 (Platt's Metals Week, 1997).

According to data compiled by the International Copper Study Group, there was a slight surplus of world production of about 35,000 tons, equivalent to about 1.7% of world consumption, during the first 2 months of 1997. Reported global inventories of copper have been rising slowly, increasing by about 140,000 tons through February from their 6-year low in November 1996. However, inventories still remained about 150,000 tons below February 1996 levels.

References Cited

- ASARCO Incorporated, 1997, ASARCO Annual Report 1996: New York, NY, 44 p.
- Cyprus Amax Minerals Company, 1997, Form 10-K—Fiscal year 1996: Securities and Exchange Commission, 39 p.
- Phelps Dodge Corporation, 1997, Form 10-K—Fiscal year 1996: Securities and Exchange Commission, 95 p.
- Platt's Metals Week, 1997, Chino copper miners vow to fight Phelps Dodge: Platt's Metals Week, v. 68, no. 11, March 17, p. 2.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless noted)

	Source table 2/	1996 p/	1997		January- March
			February	March	
Production:					
Primary:					
Mine, recoverable	(2)	1,910,000	143,000 r/	157,000	457,000
Smelter 3/	(3)	1,300,000 r/	110,000 r/	126,000	354,000
Refinery:					
Electrolytic:					
Domestic	(4)	1,290,000	109,000 r/	109,000	332,000
Foreign	(4)	146,000	9,050 r/	7,570	24,900
Electrowon	(4)	574,000	43,700 r/	47,100	139,000
Total	(4)	2,010,000	162,000 r/	164,000	495,000
Secondary recoverable copper:					
Refineries	(5)	327,000	30,000	36,400	102,000
Ingot makers 4/	(5)	124,000	10,300	10,300	31,000
Brass and wire-rod mills	(5)	717,000 r/	61,300	66,500	193,000
Foundries, etc.	(5)	62,400	5,200	5,200	15,600
Consumption:					
Total apparent	(8)	2,820,000 r/	231,000	NA	NA
Refined (reported)	(7)	2,630,000	225,000	234,000	698,000
Purchased copper-base scrap	(9)	1,640,000	144,000	151,000	439,000
Stocks at end of period:					
Total refined	(11)	147,000 r/	154,000	161,000	XX
Blister, etc.	(11)	173,000	172,000 r/	140,000	XX
Prices:					
U.S. producer cathode (cents per pound)	(12)	109.044	113.564	118.141	114.551
Imports:					
Ores and concentrates 5/	(14)	72,400	4,660	NA	NA
Refined	(14)	543,000	48,000	NA	NA
Exports:					
Ores and concentrates 5/	(15)	195,000	17,200	NA	NA
Refined	(15)	170,000	9,770	NA	NA

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ From domestic and foreign ores.

4/ 1996 and 1997 monthly data estimated based on 1995 monthly average.

5/ Copper content.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER
IN THE UNITED STATES 1/

(Metric tons)

Period	State		Total
	Arizona	Others 2/	
1996: p/			
March	108,000	55,800	164,000
April	103,000	53,900	157,000
May	107,000	53,700	161,000
June	106,000	56,100	163,000
July	104,000	57,400	161,000
August	106,000	58,900	165,000
September	99,900	58,200	158,000
October	105,000	59,300	164,000
November	102,000	55,000	157,000
December	104,000	60,800	165,000
Jan. - Mar.	305,000	154,000	459,000
Year total	1,240,000	667,000	1,910,000
1997:			
January	97,900	59,800	158,000
February r/	88,400	54,300	143,000
March	102,000	54,600	157,000
Jan. - Mar.	288,000	169,000	457,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes production from California, Idaho, Michigan, Missouri, Montana, Nevada, New Mexico, Utah, and Wisconsin.

TABLE 3
COPPER 1/ PRODUCED AT SMELTERS IN THE UNITED STATES, BY SOURCE 2/

(Metric tons, copper content)

Period	Domestic and foreign ores	Scrap	Total
1996: p/			
March	104,000	30,200	134,000
April	105,000	28,200	133,000
May	97,600	27,400	125,000
June	105,000	29,300	134,000
July	106,000 r/	29,500 r/	136,000
August r/	99,600	28,100	128,000
September	114,000 r/	26,800 r/	140,000
October	118,000 r/	27,500 r/	146,000
November	112,000 r/	25,100 r/	137,000
December	116,000 r/	30,800 r/	146,000
Jan. - Mar.	328,000	86,400	415,000
Year total	1,300,000 r/	339,000 r/	1,640,000
1997:			
January	118,000	28,200 r/	146,000
February r/	110,000	25,800	136,000
March	126,000	28,700	155,000
Jan. - Mar.	354,000	82,700	437,000

p/ Preliminary. r/ Revised.

1/ Includes blister, anode and black copper from primary or secondary sources.

2/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap			Total refined
	Electrolytically refined 2/		Electrowon	Total	Electro-lytically refined 2/	Fire refined	Total	
	Domestic 3/	Foreign						
1996: p/								
March	107,000	14,400	45,900	168,000	14,200	14,000	28,200	196,000
April	110,000	14,800	47,400	173,000	14,200	10,400	24,700	197,000
May	107,000	13,900	50,700	172,000	16,900	12,700	29,600	201,000
June	94,600	9,430	48,300	152,000	17,300	13,700	30,900	183,000
July	113,000	10,600	48,200	172,000	18,100	6,310	24,400	196,000
August	102,000	12,000	47,100	161,000	14,000	11,000	25,000	186,000
September	105,000	12,700	45,900	163,000	12,900	13,900	26,800	190,000
October	122,000	9,190	51,600	183,000	17,200	13,500	30,600	213,000
November	105,000	10,100	47,800	163,000	15,000	10,900	25,900	189,000
December	113,000	8,240	49,700	171,000	18,500	7,800	26,300	198,000
Jan. - Mar.	323,000	45,000	137,000	505,000	42,200	40,200	90,700	595,000
Year total	1,290,000	146,000	574,000	2,010,000	186,000	140,000	327,000	2,340,000
1997:								
January	114,000	8,240	47,800 r/	170,000	24,500	11,500	36,000	206,000
February	109,000 r/	9,050	43,700 r/	162,000 r/	18,000	12,000	30,000	192,000 r/
March	109,000	7,570	47,100	164,000	21,800	14,600	36,400	200,000
Jan. - Mar.	332,000	24,900	139,000	495,000	64,200	38,100	102,000	597,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASED SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 4/		Total 5/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1996: p/									
March	11,100	17,200	2,890	7,440	57,600	2,660	2,240	2,960	104,000
April	8,200	16,500	2,890	7,440	57,400	4,240	2,240	2,960	102,000
May	10,000	19,600	2,890	7,440	60,100	4,230	2,240	2,960	109,000
June	10,900	20,000	2,890	7,440	58,700	4,960	2,240	2,960	110,000
July	6,010	18,400	2,890	7,440	50,100	3,880	2,240	2,960	93,900
August	8,310	16,700	2,890	7,440	55,600	3,870	2,240	2,960	100,000
September	10,300	16,500	2,890	7,440	55,000	3,850	2,240	2,960	101,000
October	10,900	19,800	2,890	7,440	56,300	3,640	2,240	2,960	106,000
November	8,730	17,200	2,890	7,440	53,400 r/	4,580	2,240	2,960	99,400 r/
December	5,750	20,600	2,890	7,440	52,300 r/	4,410	2,240	2,960	98,500 r/
Jan. - Mar.	31,900	50,500	8,670	22,300	171,000	9,000	6,710	8,890	309,000
Year total	111,000	216,000	34,700	89,200	670,000 r/	46,700	26,900	35,600	1,230,000
1997:									
January	10,800	25,200	2,890	7,440	61,500	3,340	2,240	2,960	116,000
February	10,600	19,400	2,890	7,440	60,100	1,170	2,240	2,960	107,000
March	13,300	23,100	2,890	7,440	64,100	2,370	2,240	2,960	118,000
Jan. - Mar.	34,600	67,700	8,670	22,300	186,000	6,880	6,710	8,890	341,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Data no longer collected monthly; 1995 and 1996 data estimated based on 1995 annual data.

4/ Estimate based on 1995 annual data.

5/ Does not include an estimate, based on reported 1995 data, of 3,100 tons per month from new scrap and 2,330 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills
1996: p/						
March	144,000	171,000	142,000	160,000	51,300	74,300
April	131,000	157,000	133,000	175,000	49,400	55,800
May	130,000	173,000	129,000	165,000	51,000	63,200
June	131,000	163,000	126,000	151,000	55,200	75,200
July	111,000	139,000	114,000	152,000	52,200	62,900
August	130,000	142,000	132,000	156,000	50,300	48,500
September	135,000	163,000	136,000	158,000	49,300	53,200
October	139,000	180,000	139,000	184,000	49,400	50,100
November	135,000	176,000	134,000	171,000	50,700	55,000
December	114,000	155,000	113,000	143,000	52,000	66,500
Jan. - Mar.	392,000	468,000	394,000	463,000	XX	XX
Year total	1,550,000	1,920,000	1,550,000	1,920,000	XX	XX
1997:						
January	134,000	178,000	135,000	183,000	51,100 r/	61,300
February	132,000	169,000	132,000	163,000	51,500	67,200
March	143,000	173,000	142,000	171,000	52,400	69,200
Jan. - Mar.	409,000	520,000	409,000	517,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 7
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire rod mills	Brass mills 2/	Other plants 3/	Total
1996: p/				
March	181,000	56,400	4,630	242,000
April	162,000	47,500	4,630	214,000
May	184,000	47,500	4,630	236,000
June	164,000	49,400	4,630	218,000
July	147,000	41,900	4,630	193,000
August	154,000	50,100	4,630	209,000
September	162,000	55,600	4,630	222,000
October	185,000	54,100	4,630	244,000
November	177,000	47,300 r/	4,630	229,000
December	150,000	45,700 r/	4,630	200,000 r/
Jan. - Mar.	500,000	149,000	13,900	662,000
Year total	1,980,000	588,000 r/	55,600	2,630,000
1997:				
January	179,000	55,000	4,630	239,000
February	172,000	48,600	4,630	225,000
March:				
Cathodes	174,000	33,800	1,120	209,000
Wire bars	--	W	W	W
Ingots and ingot bars	--	1,690	1,660	3,350
Cakes and slabs	--	6,950	W	6,950
Billets and other	--	13,000	1,860	14,900
Total	174,000	55,500	4,630	234,000
Jan. - Mar.	525,000	159,100	13,890	698,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Billets and other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ In 1995, brass mills consumed 2,210 tons of refined lead, 706 tons of pig tin, 3,870 tons of refined nickel, and 64,100 tons of slab zinc.

3/ Monthly consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers; estimated based on 1995 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Net refined imports	Stock change during period	Apparent consumption
1996: p/					
March	168,000	32,600	29,400 r/	(7,120)	237,000 r/
April	173,000	33,400	31,000 r/	10,800	226,000 r/
May	172,000	36,500	40,400 r/	(26,400)	275,000 r/
June	152,000	37,700	27,100 r/	(7,400)	224,000 r/
July	172,000	35,000	30,600 r/	23,300	214,000 r/
August	161,000	33,300	40,500 r/	(6,660)	242,000 r/
September	163,000	33,100	41,300 r/	(13,100)	251,000 r/
October	183,000	36,100	22,800 r/	(4,510)	246,000 r/
November	163,000	34,500	42,800 r/	(14,100)r/	254,000 r/
December	171,000	37,700	26,600 r/	21,500 r/	214,000 r/
Jan. - Feb.	337,000	65,100	41,100 r/	7,180	436,000 r/
Year total	2,010,000	415,000	374,000 r/	(16,500)r/	2,820,000 r/
1997:					
January	170,000	41,300	44,300	4,510 r/	251,000 r/
February	162,000 r/	33,300	38,200	2,440 r/	231,000
March	164,000	38,200	NA	7,180	NA
Jan. - Feb.	331,000	74,500	NA	6,940	NA

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base and of non-copper-base materials and estimates for annual reporters based on 1995 data.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. e/		Total scrap used
	New scrap 2/	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1996: p/									
March	11,700	32,200	3,870	11,300	72,300	3,570	2,570	3,390	141,000
April	9,680	26,800	3,870	11,300	71,900	5,000	2,570	3,390	134,000
May	10,800	31,400	3,870	11,300	75,500	5,100	2,570	3,390	144,000
June	13,200	36,300	3,870	11,300	73,200	5,990	2,570	3,390	150,000
July	8,120	27,900	3,870	11,300	63,800	4,790	2,570	3,390	126,000
August	10,000	28,300	3,870	11,300	70,700	4,880	2,570	3,390	135,000
September	12,700	27,000	3,870	11,300	69,100	5,010	2,570	3,390	135,000
October	11,600	33,500	3,870	11,300	71,600	4,510	2,570	3,390	142,000
November	10,700	29,000	3,870	11,300	67,900	5,530	2,570	3,390	134,000
December	7,700	31,700	3,870	11,300	66,100	5,400	2,570	3,390	132,000
Jan. - Mar.	34,900	87,000	11,600	33,900	215,000	11,500	7,710	10,200	412,000
Year total	130,000	359,000	46,400	136,000	845,000	57,700	30,800	40,600	1,640,000
1997:									
January	10,900 r/	30,700 r/	3,870	11,300	77,800	3,420	2,570	3,390	144,000
February	10,700 r/	34,700 r/	3,870	11,300	76,300	1,240	2,570	3,390	144,000
March	12,500	33,100	3,870	11,300	81,800	2,470	2,570	3,390	151,000
Jan. - Mar.	34,000	98,500	11,600	33,900	236,000	7,130	7,710	10,200	439,000

e/ Estimated. p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Data for 1996 and 1997 are estimated from 1995 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	1996 p/		1997			
	Jan. - Mar.	Year total	January	February	March	Jan. - Mar.
No. 1 wire and heavy:						
Smelters and refiners	40,200	147,000	12,000	12,800	15,300	40,100
Brass and wire-rod mills	89,500	355,000	33,300	29,400	32,300	95,000
No. 2 mixed heavy and light:						
Smelters and refiners	50,500	215,000	18,400	23,300 r/	20,300	62,000
Brass and wire-rod mills	8,350	34,600	3,070	3,340	2,730	9,140
Total unalloyed scrap:						
Smelters and refiners	90,700	362,000	30,400	36,100 r/	35,600	102,000
Brass mills	97,900	390,000	36,400	32,700	35,000	104,000
Red brass: 3/						
All plants	16,500	66,200	5,690	5,440	5,740	16,900
Leaded yellow brass:						
All plants	96,700	397,000 r/	35,700	35,900	38,200	110,000
Yellow and low brass:						
Smelters and refiners	(4/)	(4/)	(4/)	(4/)	(4/)	(4/)
Brass mills	13,900	52,000	3,240	3,330	3,760	10,300
Cartridge cases and brass:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	12,300	45,700	4,320	4,490	5,260	14,100
Auto radiators:						
Smelters and refiners	18,300	73,000	6,080	6,080	6,080	18,300
Bronzes:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	2,970	11,200	1,050	1,100	1,070	3,210
Nickel-copper alloys:						
Smelters and refiners	--	--	--	--	--	--
Brass mills	6,120	20,500	1,620	1,260	1,950	4,830
Low grade & residues:						
Smelters and refiners	22,600	88,800	7,520	5,820	7,300	20,600
Other alloy scrap: 5/						
Smelters and refiners	9,650	41,400	3,960	3,790	3,790	11,500
Brass mills	1,120	4,440	326	392	366	1,080
Total alloyed scrap:						
Smelters and refiners	76,900	309,000	26,400	24,500	26,000	76,800
Brass mills	128,000	512,000	44,800	44,800	49,300	139,000
Total scrap:						
Smelters and refiners	168,000	671,000	56,800	60,600 r/	61,500	179,000
Brass and wire-rod mills	226,000	902,000	81,200	77,500	84,300	243,000

p/ Preliminary. r/ Revised.

1/ Does not include: consumption by foundries, chemical plants and miscellaneous manufacturers, estimated to total about 6,000 tons of scrap per month in 1995; consumption of home scrap at brass mills which averaged 57,200 tons per month in 1995. Monthly data include estimates of about 30,000 tons of scrap per month consumed by ingot makers and several smelters that report only on an annual basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zinc bronze, railroad car boxes, cocks and faucets, gilding metal and commercial bronze.

4/ Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap."

5/ Includes refinery brass, beryllium copper, phosphor copper and aluminum bronze.

TABLE 11
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper						Total refined
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/	LME 6/	
1996: p/								
March	153,000	33,800	19,500	9,820	3,540	12,600	84,000	163,000
April	171,000	35,600	25,500	11,300	3,540	18,800	79,400	174,000
May	166,000	35,500	19,200	9,840	3,540	12,000	67,500	148,000
June	162,000	33,500	13,100	12,700	3,540	6,880	70,400	140,000
July	154,000	41,700	29,700	13,700	3,540	16,100	58,700	164,000
August	161,000 r/	34,000	25,800	13,800	3,540	20,100	59,600	157,000
September	161,000	32,400	19,400	12,800	3,540	19,700	56,000	144,000
October	163,000	33,900	31,000	13,200	3,540	28,600	29,200	139,000
November	167,000	32,200	30,600	11,900 r/	3,540	26,000	20,900	125,000
December	173,000	32,200	32,100	14,000 r/	3,540	26,600	38,300	147,000 r/
1997:								
January	168,000	30,200	28,000	13,100	3,540	16,700	59,800	151,000
February	172,000 r/	33,000	22,300	13,000	3,540	22,500	59,300	154,000
March	140,000	35,500	23,600	11,000	3,540	38,600	48,600	161,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for non-respondents.

4/ Monthly estimates based on reported and 1995 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price		Comex first position 3/	LME cash price Grade A
	Cathode 1/	Wirebar 2/		
1996:				
March	121.540	130.200	118.200	116.140
April	122.628	131.286	119.286	117.707
May	126.667	135.327	123.327	120.527
June	107.828	116.538	104.488	98.447
July	94.007	102.693	90.667	90.006
August	95.479	104.139	92.139	91.072
September	93.848	102.623	90.508	88.026
October	96.873	105.533	93.533	88.935
November	104.097	112.776	100.776	101.149
December	104.114	114.781	102.781	102.837
Average	109.044	117.888	105.872	104.045
1997:				
January	111.949	120.054	108.291	110.417
February	113.564	122.224	110.224	109.081
March	118.141	126.803	114.803	109.803
Average	114.551	123.027	111.106	109.767

1/ Listed as "U.S. producer cathode."

2/ Listed as "Electrolytic wirebar (Warrenton Refining Co.)."

3/ Listed as "Comex high grade first position."

Sources: Platt's Metals Week and American Metal Market.

TABLE 13
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
1996:				
March	113.06	96.54	92.53	57.66
April	114.20	96.99	84.43	58.00
May	116.25	97.10	84.59	57.84
June	96.95	83.00	77.85	55.35
July	88.58	69.76	64.43	46.79
August	90.85	73.93	64.00	46.09
September	88.69	72.56	64.00	46.00
October	89.21	73.04	64.00	46.00
November	97.04	79.22	64.63	46.63
December	99.17	81.94	65.00	47.00
Average	101.53	84.42	75.27	51.85
1997:				
January	99.29	81.49	66.13	47.57
February	106.74	87.80	67.42	48.21
March	109.74	91.18	71.80	53.60
Average	105.26	86.82	68.45	49.79

Source: American Metal Market.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1997			1997			1997			1997		
	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.
Brazil	--	--	--	--	--	--	--	--	--	15,600	301	301
Canada	9,000	--	--	236	13	31	80,200	5850	12700	278,000	26,000	49,500
Chile	59,800	4,660	4,660	--	--	--	51,700	1,980	5,850	119,000	10,300	24,000
Germany	--	--	--	--	--	--	--	--	--	9,960	(2/)	(2/)
Japan	--	--	--	--	--	--	(2/)	--	--	3,940	54	1,690
Kazakhstan	--	--	--	--	--	--	--	--	--	2,630	--	1,550
Mexico	3,680	--	--	2,050	83	144	19,600	--	988	30,300	1,890	3,330
Peru	--	--	--	--	--	--	9,550	--	1,500	64,700	9,230	23,400
Russia	--	--	--	--	--	--	--	--	--	15,000	--	4
Spain	--	--	--	--	--	--	2,710	--	554	--	--	--
Taiwan	--	--	--	24	1	12	--	--	(2/)	(2/)	(2/)	(2/)
Other	3	--	13	81 r/	--	--	649	--	--	4420	166	195
Total	72,400	4,660	4,670	2,390	97	187	164,000	7,820	21,600	543,000	48,000	104,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 15
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1997			1997			1997			1997		
	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.
Belgium	--	--	--	3	--	71	239	52	52	46	--	--
Brazil	2,810	--	--	5	--	--	--	--	--	25	--	--
Canada	79,900	6,480	10,300	31,500	2,520	3,890	18,000	1,020	2,430	28,700	1,280	4,780
China	54,500	9,150	9,150	2	--	--	44	997	997	233	--	--
Germany	76	--	--	1	--	--	463	48	48	189	9	9
Hong Kong	16	--	--	29	17	17	1,170	387	1,090	525	--	47
Indonesia	--	--	--	--	--	--	39	44	44	--	--	--
Italy	8	--	--	2	--	--	451	42	175	2,150	--	--
Japan	47,600	1,540	1,540	2,130	--	19	456	58	183	31,900	1,490	4,090
Korea, Republic of	1,570	--	--	19	--	--	1,100	102	278	3,480	736	1,230
Malaysia	--	--	--	--	--	--	(2/)	--	--	6,470	--	--
Mexico	2,340	--	--	2,790	1,610	2,770	410	9	45	11,800	52	401
Singapore	--	--	--	8	--	--	44	64	116	2,690	--	636
Spain	2,800	--	--	6	--	--	15	15	15	7	--	--
Taiwan	--	--	--	--	--	--	330	63	502	54,100	5,020	7,230
Thailand	--	--	--	--	--	--	112	--	22	26,400	1,000	1,990
Other	3,550	2	4	567 r/	18	124	369 r/	60	123	1,050 r/	170	431
Total	195,000	17,200	21,000	37,100	4,170	6,900	23,200	2,960	6,120	170,000	9,770	20,800

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 16
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	1997			1997			1997			1997		
	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.	1996	Feb.	Jan.-Feb.
Belgium	--	--	--	33	--	--	9,380	63	199	1,440	216	245
Canada	40,500	3,970	9,140	57,700	4,680	9,220	104,000	9,140	18,600	41,900	3,000	6,680
Chile	11,800	13	1,210	178	18	18	--	--	--	5	--	--
China	--	--	--	79	--	--	12,600	727	1,430	24,900	1,960	3,980
Colombia	668	114	184	3,020	123	165	--	--	--	3	--	--
Costa Rica	1,320	139	224	386	69	88	--	--	--	--	--	--
Dominican Republic	603	103	197	1,940	147	233	--	--	--	--	--	--
El Salvador	459	20	71	530	20	62	--	--	--	20	140	140
Germany	4	(2/)	1	122	--	--	7,190	3,480	3,580	5,290	187	366
Hong Kong	--	--	--	120	--	--	28,600	2,480	4,320	43,200	2,710	3,840
India	--	--	--	--	--	--	3,960	245	265	29,800	1,680	4,020
Japan	2	--	--	83	4	20	19,300	1,430	3,040	18,700	1,030	2,640
Korea, Republic of	--	--	--	18	--	--	5,140	662	952	11,200	1,720	2,550
Kuwait	--	--	--	24	146	146	--	--	--	--	--	--
Mexico	27,900	2,030	3,490	42,400	3,030	6,090	2,470	57	135	4,030	304	539
Netherlands Antilles	5	2	20	290	67	205	--	--	--	--	--	--
Panama	1,020	128	259	1,100	55	91	--	--	--	--	--	--
Switzerland	--	--	--	--	--	17	2,760	--	--	18	--	--
Taiwan	102	(2/)	3	1,480	214	483	1,340	1	93	4,970	269	435
Thailand	--	--	--	36	--	--	37	19	19	2,460	324	456
United Kingdom	(2/)	--	--	1,310	203	203	194	--	--	381	74	93
Venezuela	2,600	214	426	2,540	317	547	--	--	--	40	--	--
Other	3,370 r/	142	383	8,440 r/	689	1,360	673	41	63	6,960 r/	328	660
Total	90,300	6,870	15,600	122,000	9,780	18,900	197,000	18,300	32,700	195,000	13,900	26,600

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.